

**MATERIAL SAFETY DATA SHEET**(MAY BE USED TO COMPLY WITH OSHA'S HAZARD COMMUNICATION STANDARD)  
29 CFR 1910.1200 STANDARD MUST BE CONSULTED FOR SPECIFIC REQUIREMENTS**COPPER (CU)****PAGE 1 OF 2****SECTION I**

<b>MANUFACTURER'S NAME:</b> OWL WIRE AND CABLE, INC.	<b>EMERGENCY TELEPHONE NUMBER:</b> (415) 777 - 2213
<b>ADDRESS (NUMBER, STREET):</b> 3127 SENECA TURNPIKE	<b>TELEPHONE NUMBER FOR INFORMATION:</b> (315) 697 - 2011
<b>CITY:</b> CANASTOTA	<b>DATE PREPARED:</b> 09-07-04
<b>STATE AND ZIP CODE</b> NEW YORK 13032	<b>SIGNATURE OF PREPARER: (OPTIONAL)</b>

**SECTION II****HAZARDOUS INGREDIENTS / IDENTITY INFORMATION**

HAZARDOUS COMPONENTS: SPECIFIC CHEMICAL IDENTITY: COMMON NAME(S)	OSHA PEL	ADGIH TLV	RECOMMENDED	% (OPTIONAL)
<b>COPPER (CU)</b>	7440-50-8	0.1 FUME	0.2 FUME	99.9
		1.0 DUST	1.0 DUST	

**SECTION III****PHYSICAL / CHEMICAL CHARACTERISTICS**

<b>BOILING POINT</b> 2324° C	<b>SPECIFIC GRAVITY (H<sub>2</sub>O - 1)</b> 8.92
<b>VAPOR PRESSURE (MM Hg)</b> 1 MM HG AT 1628° C	<b>MELTING POINT</b> 1083° C
<b>VAPOR DENSITY (AIR - 1)</b> NOT APPLICABLE	<b>EVAPORATION RATE (BUTYL ACETATE - 1)</b> NOT APPLICABLE
<b>SOLUBILITY IN WATER</b> INSOLUABLE	
<b>APPEARANCE AND ODOR</b> VARIOUS SIZES:           YELLOW:                                   RED METAL	

**SECTION IV****FIRE AND EXPLOSION HAZARD DATA**

<b>FLASH POINT (METHOD USED)</b> NOT APPLICABLE	<b>FLAMMABLE LIMITS</b> NOT APPLICABLE	<b>LEL</b> NOT APPLICABLE	<b>UEL</b> NOT APPLICABLE
<b>EXTINGUISHING MEDIA</b> NO SPECIFIC AGENTS RECOMMENDED			
<b>SPECIAL FIRE FIGHTING PROCEDURES</b> FIREFIGHTERS SHOULD WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND WEAR FULL PROTECTIVE CLOTHING.			
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS</b> NOT APPLICABLE			

**SECTION V  
REACTIVITY DATA**

<b>STABILITY</b>	UNSTABLE		CONDITIONS TO AVOID
	STABLE	<b>X</b>	AVOID CONTACT WITH ACIDS
<b>INCOMPATIBILITY (MATERIALS TO AVOID)</b> REACTS VIOLENTLY WITH ACETYLENE, AMMONIUM NITRATE, BROMATES, CHLORATES, IODATES. COPPER FOIL BURNS SPONTANEOUSLY IN GASEOUS CHLORINE. AVOID CONTACT WITH CHLORINE AND OXYGEN DIFLUORIDE, ETHYLENE OXIDE, FLUORINE, HYDROGEN PEROXIDE, HYDRAZINE MONONITRATE, HYDRAZOIC ACID. INCOMPATIBLE WITH SODIUM AZIDE AND SODIUM PEROXIDE.			
<b>HAZARDOUS POLYMERIZATION</b>	MAY OCCUR		HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: DOES NOT DECOMPOSE. REACTION WITH ACIDS COULD PRODUCE NOXIOUS GASES.
	WILL NOT OCCUR	<b>X</b>	COPPER OXIDE FUMES MAY EVOLVE: CONDITIONS TO AVOID

**SECTION VI  
HEALTH HAZARD DATA**

ROUTES OF ENTRY:	INHALATION?    X	SKIN?	INGESTION?    X
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**HEALTH HAZARDS: (ACUTE AND CHRONIC)**

**CHRONIC:**

LONG-TERM OVER EXPOSURE TO COPPER DUST OR FUMES MAY CAUSE SKIN IRRITATION OR DISCOLORATION OF THE SKIN AND HAIR.

CARCINOGENICITY:	NTP?	IARC MONOGRAPHS	OSHA REGULATED?
NOT LISTED AS A CARCINOGEN BY NTP, IARC OR OSHA			

**SIGNS AND SYMPTOMS OF EXPOSURE?**

ACUTE EXPOSURE MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT OR METAL FUME FEVER WITH SYMPTOMS OF FEVER, CHILLS, NAUSEA, CHEST TIGHTNESS, METALLIC TASTE.

**EMERGENCY AND FIRST AID PROCEDURES:**

INGESTION:        GIVE 2-3 GLASSES OF WATER, INDUCE VOMITING AND CALL A PHYSICIAN.

INHALATION:     1. REMOVE FROM EXPOSURE.  
                      2. SYMPTOMATIC TREATMENT SUCH AS BED REST AND ASPIRIN MAY AFFORD SOME RELIEF FROM CHILLS AND FEVER.  
                      3. PLACE INDIVIDUAL UNDER CARE OF PHYSICIAN.

EYES:             IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 20 MINUTES. IF FOREIGN BODY ENTERED INTO EYE, REFER IMMEDIATELY TO A PHYSICIAN.

**SECTION VII  
PRECAUTIONS FOR SAFE HANDLING AND USE**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

CONSULT FEDERAL, STATE AND LOCAL REGULATIONS CONCERNING COPPER RELEASE TO THE ENVIRONMENT.

**WASTE DISPOSAL METHOD:**

DISPOSE OF IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

AVOID STORAGE NEAR ACETYLENE, CHLORINE OR HYDROGEN PEROXIDES. **DO NOT** STORE NEAR HALOGENETES OF BARIUM, CALCIUM, MAGNESIUM, POTASSIUM, SODIUM OR ZINC.

**REFERENCES:**    OSHA REGULATIONS FOR AIRBORNE CONTAMINANTS 29 CFR 1910.1000

**SECTION VIII  
CONTROL MEASURES**

**RESPIRATORY PROTECTION - (SPECIFY TYPE)**

NIOSH / MSHA APPROVED RESPIRATOR FOR TOXIC DUST AND/OR FUMES.

**VENTILATION:**

**LOCAL EXHAUST:**

IF CONCENTRATIN OF DUST/FUMES ARE EXPECTED TO EXCEED PERMISSIBLE EXPOSURE LIMIT.

**OTHER:**

**PROTECTIVE GLOVES:**

YES, FOR HOT OPERATIONS

**EYE PROTECTION:**

SAFETY GLASSES RECOMMENDED

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:**

FIRE RESISTANT CLOTHING COULD BE REQUIRED AROUND HOT METAL OPERATIONS

**SECTION IX  
MEDICAL CONDITIONS POSSIBLY AGGRAVATED**

**PERSONS WITH WILSON'S DISEASE (AN ABNORMAL GENETIC CONDITION) COULD BE AFFECTED BY COPPER EXPOSURE.**

**SECTION X  
SARA TITLE III - SECTION 313 CHEMICAL:                    YES**